

Appl. No. 10/016,238
Amdt. Dated December 6, 2005
Reply to Office action of September 21, 2005

APP 1412

Amendments to the Drawings

The attached sheets of drawings include the additions to Figs 1, 2, and 7 of the descriptive labels, as required by the Examiner. The attached sheets are replacements for the originally filed sheets containing Figs. 1, 2, and 7.

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Remarks/Arguments

The specification is being amended to identify a related application of applicants wherein a related invention is disclosed and claimed. The specification has also been amended to correct a minor grammatical error therein.

As required by the Examiner, new Figs. 1, 2, and 7 are being submitted as replacement sheets, the descriptive labels having been added to these figures.

Claims 1-3, 7 and 9-12 were provisionally rejected under obvious-type double patenting as being unpatentable over claims of applicants' co-pending application 10/016,099 in view of Kwok et al Patent Application Publication US 0003/0016651 (hereinafter Kwok), claims 5-6 and 17-18 were similarly rejected further in view of Boger Patent Application Publication US 2002/0159401, and claims 8 and 20 similarly rejected further in view of Beasley et al Patent Application Publication US 2002/0187749. Applicants submit that this basis of these rejections has been obviated by the formal abandonment of application 10/016,099.

Claims 1-4, 7, 9-16 and 21-24 were also rejected, 35 USC 102(e), as anticipated by Kwok, claims 5-6 and 17-18 were also rejected, 35 USC 103(a), as unpatentable over Kwok in view of Boger, and claims 8 and 20 were rejected as unpatentable, 35 USC 103(a), over Kwok in view of Beasley et al. In response thereto applicants have canceled claims 1-24 and are presenting in their place claims 25 and 26 directed to the embodiment of their invention depicted in Fig. 7 of their application.

While Kwok is also concerned with collisions on channels in a Bluetooth system, there are many distinctions between their disclosure and teaching and applicants' invention, as recited in new claim 25. Specifically, Kwok requires that all Bluetooth devices with the hub share the same clock, whereas applicants' invention specifically provides for individual clocks at each of the radio modules, thus allowing the frequency hopping patterns in their system to be independent of each other. Kwok requires that Bluetooth connections be established using pre-configured addresses that minimize the likelihood of collisions, whereas applicants' invention has no such requirement. While Kwok requires that special Bluetooth addresses be used to create the frequency hop sequences, applicants' invention utilizes the factory assigned addresses associated with the Bluetooth devices in consideration.

Further, as specifically recited in new claim 25, applicants' invention eliminates frequency collision without inhibiting transmission whereas Kwok requires that only one packet be transmitted during a collision time slot. Further in applicants' invention, as recited by the structural elements set forth in new claim 25, clock offsets are accounted for as for the case when clocks on the Bluetooth hub are not synchronized.

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These deficiencies in Kwok are not remedied by the disclosures of Boger and Beasley et al. Boger merely discusses, at paragraph 22 cited by the Examiner, the use of time out periods during which a packet may be received. Boger is directed to reestablishing connections after a master device has been replaced by a slave device. This is not relevant to applicants' invention. Beasley et al discuss synchronizing base stations, but have no disclosure or teaching relevant to applicants' inventive combination as recited in new claim 25, with respect to a prediction circuit including memory units and delay circuits. Further, applicants fail to see the relevance of Beasley et al paragraph 75 in this regard.

New claim 26, dependent on claim 25, further adds that the scanner repetitively scans the first coordinates of the matrix, the successive scans being incremented by a selectable number of time slots at the end of each scan that does not detect the occurrence of a collision.

Favorable consideration and allowance of new claims 25 and 26 and passage of this application to issue are accordingly respectfully requested.

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